

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A clocked inverter comprising:
a first transistor and a second transistor connected in series, [[and]]
~~a compensation circuit comprising a third transistor and a fourth transistor~~
connected in series, and
a fifth transistor and a sixth transistor connected in series, wherein:
gates of the third transistor and the fourth transistor are connected to each other,
drains of the third transistor and the fourth transistor are each connected to a
gate of the first transistor,
sources of the first transistor and the fourth transistor are each electrically
connected to a first power source,
~~a source of the second transistor is~~ sources of the second transistor and the sixth
transistor are electrically connected to a second power source, [[and]]
gates of the fifth transistor and the sixth transistor are connected to each other,
drains of the fifth transistor and the sixth transistor are each connected to a gate
of the second transistor,
an amplitude of a first signal inputted to a source of the third transistor is smaller
than a potential difference between the first power source and the second power
source, and
an amplitude of a second signal inputted to a source of the fifth transistor is
smaller than the potential difference between the first power source and the second
power source.

2. (Currently Amended) A clocked inverter according to claim 1, wherein:

the first power source is a high potential power source;

the second power source is a low potential power source;

the first ~~transistor and transistor~~, the fourth ~~transistor transistor~~, and the fifth ~~transistor~~ are each a P-type transistor; and

the second ~~transistor and transistor~~, the third ~~transistor transistor~~, and the sixth ~~transistor~~ are each an N-type transistor.

3. (Currently Amended) A clocked inverter according to claim 1, wherein:

the first power source is a low potential power source;

the second power source is a high potential power source;

the first ~~transistor and transistor~~, the fourth ~~transistor transistor~~, and the fifth ~~transistor~~ are each an N-type transistor; and

the second ~~transistor and transistor~~, the third ~~transistor transistor~~, and the sixth ~~transistor~~ are each a P-type transistor.

4. (Original) A clocked inverter according to claim 1, wherein the third transistor is replaced with an analog switch.

5. (Currently Amended) A clocked inverter comprising:

first to third transistors connected in series, and

~~a compensation circuit comprising~~ a fourth transistor and a fifth transistor connected in series, wherein:

gates of the fourth transistor and the fifth transistor are connected to each other;

drains of the fourth transistor and the fifth transistor are each connected to a gate of the first transistor;

sources of the first transistor and the fifth transistor are each electrically connected to a first power source;

a source of the third transistor is electrically connected to a second power source; and

an amplitude of a signal inputted to a source of the fourth transistor is smaller than a potential difference between the first power source and the second power source.

6. (Original) A clocked inverter according to claim 5, wherein:

the first power source is a high potential power source;

the second power source is a low potential power source;

the first transistor and the fifth transistor are each a P-type transistor; and

the second to fourth transistors are each an N-type transistor.

7. (Original) A clocked inverter according to claim 5, wherein:

the first power source is a high potential power source;

the second power source is a low potential power source;

the first transistor, the second transistor, and the fifth transistor are each a P-type transistor; and

the third transistor and the fourth transistor are each an N-type transistor.

8. (Original) A clocked inverter according to claim 5, wherein:

the first power source is a low potential power source;

the second power source is a high potential power source;

the first transistor and the fifth transistor are each an N-type transistor; and

the second to fourth transistors are each a P-type transistor.

9. (Original) A clocked inverter according to claim 5, wherein:

the first power source is a low potential power source;

the second power source is a high potential power source;

the first transistor, the second transistor, and the fifth transistor are each an N-type transistor; and

the third transistor and the fourth transistor are each a P-type transistor.

10. (Original) A clocked inverter according to claim 5, wherein the fourth transistor is replaced with an analog switch.

11. (Currently Amended) A NAND comprising:

a first transistor and a second transistor connected in ~~parallel~~ series;

a third transistor connected to the first transistor and the second transistor in series; and

~~a compensation circuit including~~ a fourth transistor and a fifth transistor connected in series, wherein:

gates of the fourth transistor and the fifth transistor are connected to each other;

drains of the fourth transistor and the fifth transistor are each connected to a gate of the third transistor;

sources of the first transistor and the second transistor are each electrically connected to a ~~[[high]]~~ first potential power source;

sources of the third transistor and the fifth transistor are each electrically connected to a ~~[[low]]~~ second potential power source; and

an amplitude of a signal inputted to a source of the fourth transistor and each of gates of the first transistor, the second transistor, the fourth transistor, and the fifth transistor is smaller than a potential difference between the ~~[[high]]~~ first potential power source and the ~~[[low]]~~ second potential power source.

12. (Currently Amended) A NAND according to claim 11, wherein:

the first power source is a high potential power source;

the second power source is a low potential power source; and

the first transistor, the second transistor, and the fourth transistor are each a P-type transistor, and the third transistor and the fifth transistor are each an N-type transistor.

13. (Original) A NAND according to claim 11, wherein the fourth transistor is replaced with an analog switch.

14. (Currently Amended) A NOR comprising:

a first transistor and a second transistor connected in ~~parallel~~ series;

a third transistor connected to the first transistor and the second transistor in series; and

~~a compensation circuit including~~ a fourth transistor and a fifth transistor connected in series, wherein:

gates of the fourth transistor and the fifth transistor are connected to each other;

drains of the fourth transistor and the fifth transistor are each connected to a gate of the third transistor;

sources of the first transistor and the second transistor are each electrically connected to a ~~[[low]]~~ first potential power source;

sources of the third transistor and the fifth transistor are each electrically connected to a ~~[[high]]~~ second potential power source; and

an amplitude of a signal inputted to each of gates of the first transistor, the second transistor, the fourth transistor, and the fifth transistor and to a source of the fourth transistor is smaller than a potential difference between the ~~[[high]]~~ first potential power source and the ~~[[low]]~~ second potential power source.

15. (Currently Amended) A NOR according to claim 14, wherein:

the first power source is a low potential power source;

the second power source is a high potential power source; and

the first transistor, the second transistor, and the fourth transistor are each an N-type transistor, and the third transistor and the fifth transistor are each a P-type transistor.

16. (Original) A NOR according to claim 14, wherein: the fourth transistor is replaced with an analog switch.

17. (Currently Amended) A shift register comprising:

a clocked inverter including a first transistor to a third transistor connected in series; and

~~a compensation circuit including~~ a fourth transistor and a fifth transistor connected in series, wherein:

sources of the first transistor and the fifth transistor are each electrically connected to a first power source;

a source of the third transistor is electrically connected to a second power source;

a gate of the first transistor is connected to ~~an output terminal of the compensation circuit~~ drains of the fourth transistor and the fifth transistor;

a pulse generated at an (n-1)th stage is inputted to ~~an input terminal of the compensation circuit~~ gates of the fourth transistor and the fifth transistor arranged at an n-th stage; and

a pulse or a clock signal generated at an (n-2)th stage is inputted to a source of the fourth transistor arranged at the n-th stage.

18. (Original) A shift register according to claim 17, wherein:

the first power source is a low potential power source;

the second power source is a high potential power source;

the first transistor and the fifth transistor are each an N-type transistor; and

the second to fourth transistors are each a P-type transistor.

19. (Original) A shift register according to claim 17, wherein:

the first power source is a high potential power source;

the second power source is a low potential power source;

the first transistor and the fifth transistor are each a P-type transistor; and

the second to fourth transistors are each an N-type transistor.

20. (Original) A shift register according to claim 17, wherein the fourth transistor is replaced with an analog switch.

21. (Original) A shift register according to claim 17, wherein the second transistor is eliminated.

22. (Currently Amended) A shift register comprising:

a plurality of stages each of which includes: a ~~[[first]]~~ clocked inverter including a first transistor and a second transistor connected in series; ~~an inverter that forms a loop with the first clocked inverter; and a compensation circuit including an N-type transistor~~ an inverter; and a third transistor and an analog switch, wherein:

the first transistor is a P-type transistor and transistor,

the second transistor ~~[[is]]~~ and the third transistor are each an N-type transistor;

a gate of the first transistor is connected to an output terminal of the inverter and a source of the first transistor is electrically connected to a high potential power source;

a gate of the second transistor is connected to a clock signal line through a ~~drain of the N-type transistor and~~ the analog switch and a source of the second transistor is connected to a low potential power source; and

the analog switch is ~~controlled by input into and output from~~ connected to the output terminal of the inverter and an input terminal of the inverter.

23. (Currently Amended) A shift register comprising:

a plurality of stages each of which includes: a ~~[[first]]~~ clocked inverter including a first transistor and a second transistor connected in series; ~~an inverter that forms a loop with the first clocked inverter; and a compensation circuit including a P-type transistor~~ an inverter; and a third transistor and an analog switch, wherein:

the first transistor is an N-type ~~transistor and~~ transistor,

the second transistor ~~[[is]]~~ and the third transistor are each a P-type transistor;

a gate of the first transistor is connected to an output terminal of the inverter and a source of the first transistor is electrically connected to a low potential power source;

a gate of the second transistor is connected to a clock signal line through a ~~drain of the P-type transistor and the analog switch~~ and a source of the second transistor is connected to a high potential power source; and

the analog switch is ~~controlled by input into and output from~~ connected to the output terminal of the inverter and an input terminal of the inverter.

24. (Currently Amended) A clocked inverter comprising:

a first transistor and a second transistor connected in series, ~~[[and]]~~

~~a compensation circuit comprising a third transistor and a fourth transistor~~ connected in series, and

a fifth transistor and a sixth transistor connected in series, wherein:

gates of the third transistor and the fourth transistor are connected to each other, drains of the third transistor and the fourth transistor are each connected to a gate of the first transistor,

sources of the first transistor and the fourth transistor are each electrically connected to a first power source,

~~a source of the second transistor is~~ sources of the second transistor and the sixth transistor are electrically connected to a second power source,

gates of the fifth transistor and the sixth transistor are connected to each other,
drains of the fifth transistor and the sixth transistor are each connected to a gate
of the second transistor,

a first signal is inputted to a source of the third transistor, and
a second signal is inputted to a source of the fifth transistor.

25. (Currently Amended) A shift register comprising:
a first ~~compensation~~ circuit inputted with a first signal;
a second ~~compensation~~ circuit inputted with a second signal;
a first clocked inverter electrically connected with the first and second
~~compensation~~ circuits;
a third ~~compensation~~ circuit comprising a first analog switch, inputted with the
first signal;
a fourth ~~compensation~~ circuit comprising a second analog switch, inputted with
the second signal; and
a second clocked inverter electrically connected with the third and fourth
~~compensation~~ circuits.

26. (New) A clocked inverter according to claim 1, wherein the fifth transistor is
replaced with an analog switch.

27. (New) A shift register according to claim 17, wherein:
the first power source is a low potential power source;
the second power source is a high potential power source;
the first transistor, the second transistor, and the fifth transistor are each an N-
type transistor; and
the third transistor and the fourth transistor are each a P-type transistor.

28. (New) A shift register according to claim 17, wherein:
the first power source is a high potential power source;
the second power source is a low potential power source;
the first transistor, the second transistor, and the fifth transistor are each a P-type transistor; and
the third transistor and the fourth transistor are each an N-type transistor.

29. (New) A shift register according to claim 22, wherein:
a gate of the third transistor is connected to the input terminal of the inverter,
a source of the third transistor is connected to the low potential power source,
and
a drain of the third transistor is connected to the gate of the second transistor.

30. (New) A shift register according to claim 23, wherein:
a gate of the third transistor is connected to the input terminal of the inverter,
a source of the third transistor is connected to the high potential power source,
and
a drain of the third transistor is connected to the gate of the second transistor.

31. (New) A shift register according to claim 25, wherein:
the first clocked inverter comprises a first transistor and a second transistor in series,
the first circuit comprises a third transistor and a fourth transistor in series,
the second circuit comprises a fifth transistor and a sixth transistor in series, and
the second clocked inverter comprises a seventh transistor and an eighth transistor in series.

32. (New) A shift register according to claim 25, further comprising an inverter.